Clean Version of Pending Claims

1. (Amended Once) A method of forming a semiconductor device comprising:

forming a first patterned conductive layer on a dielectric material on a substrate;

forming a first barrier layer on the surface of the first patterned conductive layer;

forming a second barrier layer on the surface of the first barrier layer;

forming a dielectric layer on the surface of the second barrier layer; and

forming a via through a first portion of the dielectric layer and through a first portion of one of the first and second barrier layers.

2. The method of claim 1 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.

3. The method of claim 2 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.

4. The method of claim 3, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.

5. The method of claim 2 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.

6. The method of claim 3 further comprising forming the via through the second barrier layer followed by forming the via through the first barrier layer.

7. The method of claim 6 wherein the via is formed through the first and the second barrier layer with a single etch pass.

8. The method of claim 1 wherein the first barrier layer comprises less than 20 nanometers of silicon nitride.

9. The method of claim 8 wherein the first barrier layer comprises between 1 nanometer and 7 nanometer of silicon nitride.

10. The method of claim 1 wherein the second barrier layer comprises less than 200 nanometers of silicon carbide.

11. The method of claim 8 wherein the silicon nitride is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.

12. The method of claim 10 wherein the silicon carbide is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.

13. (Amended Once) A method of forming a semiconductor device comprising:

forming a first patterned conductive layer on a dielectric material on a substrate;

forming a first barrier layer comprising silicon nitride on the surface of the first patterned conductive layer;

forming a second barrier layer comprising silicon carbide on the surface of the first barrier layer; and

forming a dielectric layer on the surface of the second barrier layer.

14. The method of claim 13 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.

15. The method of claim 14 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.

16. The method of claim 15, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.

17. The method of claim 15 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.

18. The method of claim 14 wherein the via is formed through the first and the second barrier layer with a single etch pass.

19. The method of claim 13 wherein the first barrier layer comprising silicon nitride comprises between 1 nanometer and 7 nanometer of silicon nitride.

20. The method of claim 13 wherein the second barrier layer comprising silicon carbide comprises less than 200 nanometers of silicon carbide.

21. The method of claim 13 wherein the silicon nitride and the silicon carbide is deposited using any one of a plasma enhanced chemical vapor deposition process, a chemical vapor deposition process and an atomic layer deposition process.

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22. (Amended Once) A method of forming a semiconductor device comprising:

forming a first patterned conductive layer on a dielectric material on a substrate;

forming a first barrier layer comprising silicon nitride on the surface of the first patterned conductive layer;

forming a second barrier layer on the surface of the first barrier layer;

forming a dielectric layer on the surface of the second barrier layer; and

forming a via through a first portion of the dielectric layer and through a first portion of one of the first and second barrier layers.

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23. The method of claim 22 further comprising forming any one of a via, and a trench through a first portion of the dielectric layer.

24. The method of claim 23 further comprising forming a trench through a second portion of the dielectric layer if the via is formed through the first portion of the dielectric layer.

25. The method of claim 24, wherein the via is filled with a sacrificial light absorbing material comprising at least one of a dyed spin-on polymer and a dyed spin-on glass with dry etch properties similar to the dielectric layer.

26. The method of claim 24 further comprising forming a via through a second portion of the dielectric layer if the trench is formed through the first portion of the dielectric layer.

27. The method of claim 24 further comprising forming the via through the second barrier layer followed by forming the via through the first barrier layer.

28. The method of claim 27 wherein the via is formed through the first and the second barrier layer with a single etch pass.

29. The method of claim 22 wherein the first barrier layer comprises between 1 nanometer and 7 nanometer of silicon nitride.

30. The method of claim 22 wherein the second barrier layer comprises less than 200 nanometers of silicon carbide.